



DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA-2019-0071; Notice 2]

Toyota Motor North America, Inc., Grant of Petition for Decision of Inconsequential Noncompliance

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Grant of petition.

SUMMARY: Toyota Motor North America, Inc. (Toyota) has determined that certain Model Year (MY) 2013–2019 Toyota RAV4 and MY 2014–2019 Toyota Highlander/Highlander HV motor vehicles do not fully comply with S4 of Federal Motor Vehicle Safety Standard (FMVSS) No. 302, *Flammability of Interior Materials*. Toyota filed a noncompliance report dated June 19, 2019, and subsequently petitioned NHTSA on July 12, 2019, and later amended that petition on August 13, 2019, for a decision that the subject noncompliance is inconsequential as it relates to motor vehicle safety. This notice announces the grant of Toyota’s petition.

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SUPPLEMENTARY INFORMATION:

I. Overview:

Toyota has determined that certain MY 2013–2019 Toyota RAV4 and certain Toyota Highlander/Highlander HV motor vehicles do not fully comply with paragraph S4 of FMVSS No. 302, *Flammability of Interior Materials*. Toyota filed a noncompliance report dated June 19, 2019, pursuant to 49 CFR part 573, *Defect and Noncompliance Responsibility and Reports*, and subsequently petitioned NHTSA on July 12, 2019, and later amended its petition on August 13,

2019, for an exemption from the notification and remedy requirement of 49 U.S.C. Chapter 301 on the basis that this noncompliance is inconsequential as it relates to motor vehicle safety. *See* 49 U.S.C. 30118(d) and 30120(h), and 49 CFR part 556, *Exemption for Inconsequential Defect or Noncompliance*.

Notice of receipt of Toyota's petition was published with a 30-day public comment period, on December 3, 2019, in the **Federal Register** (84 FR 66276). No comments were received. To view the petition and all supporting documents log onto the Federal Docket Management System (FDMS) website at <https://www.regulations.gov/>. Then follow the online search instructions to locate docket number "NHTSA-2019-0071."

II. Vehicles Involved:

Approximately 2,144,217 MY 2013–2019 Toyota RAV4 and MY 2014–2019 Toyota Highlander/Highlander HV motor vehicles manufactured between December 21, 2012, and March 28, 2019, are potentially involved.

III. Noncompliance:

Toyota explains that the noncompliance relates to certain hook and loop fasteners that attach the floor carpet to the underlying padding. The loop side of the fastener is made from material that may not comply, as required, with paragraph S4.1 of FMVSS No. 302. Specifically, when tested separately from the floor carpet, the loop side of the fastener in the subject vehicles does not meet the burn rate requirements of paragraph S4.3.

IV. Rule Requirements:

Paragraphs S4.1 through S4.3(b) of FMVSS No. 302 include the requirements relevant to this petition:

S4.1 The portions described in S4.2 of the following components of vehicle occupant compartments shall meet the requirements of S4.3: Seat cushions, seat backs, seat belts, headlining, convertible tops, armrests, all trim panels including door, front, rear, and side panels, compartment shelves, head restraints, floor coverings, sun visors, curtains, shades, wheel housing covers, engine compartment covers, mattress covers, and any other interior materials, including padding and crash-deployed elements, that are designed to absorb energy on contact by occupants in the event of a crash.

S4.2.1 Any material that does not adhere to other material(s) at every point of contact shall meet the requirements of S4.3.

Paragraph S4.3(a) of FMVSS No. 302 requires that material described in S4.1 and S4.2 shall not burn, nor transmit a flame front across its surface, at a rate of more than 102 mm per minute. The requirement concerning the transmission of a flame front shall not apply to a surface created by cutting a test specimen for purposes of testing pursuant to S5.

V. Summary of Toyota's Petition: The following views and arguments presented in this section (V. Summary of Toyota's Petition), are the views and arguments provided by Toyota.

Toyota described the subject noncompliance and stated its belief that the noncompliance is inconsequential as it relates to motor vehicle safety. In support of its petition, Toyota submitted the following:

1. During pre-production evaluations of the new model Highlander (MY 2020) the supplier found that the loop fasteners might not meet the burn rate requirement of FMVSS No. 302. These same fasteners are used on the subject vehicles; they are attached to the underside of the carpet near the front footwell. Toyota conducted testing of the loop side of the fastener, in accordance with FMVSS No. 302; when tested separately from the carpet, the burn rate of the loop side of the fastener was 133 mm/min (worst of ten tests). The loop fastener material did not have flame-retardant coating, and therefore the burn rate requirement specified on the drawing was not met.

2. The loop fastener material complies with FMVSS No. 302 when tested as a “composite” as installed to the FMVSS No. 302 compliant carpet assembly.
3. The purpose of FMVSS No. 302 is to “reduce the deaths and injuries to motor vehicle occupants caused by vehicle fires, especially those originating in the interior of the vehicle from sources such as matches or cigarettes.” The noncomplying loop fastener material would normally not be exposed to open flame or an ignition source (like matches or cigarettes) in its installed application, because it is installed beneath and completely covered by the carpet material which complies with FMVSS No. 302.
4. The loop fastener material is a very small portion of the overall mass of the soft material portions comprising the carpet assembly (i.e., 0.037% or less), and is significantly less in relation to the entire vehicle interior surface area that could potentially be exposed to flame. Therefore, it would have an insignificant adverse effect on the interior material burn rate and the potential for occupant injury due to interior fire.
5. Toyota is not aware of any data suggesting that fires have occurred in the field from installation of the noncomplying loop fastener material.
 - Toyota says NHTSA has previously granted at least ten FMVSS No. 302 petitions for inconsequential noncompliance—one of which was for a vehicle’s seat heater assemblies, one of which was for a vehicle’s console armrest, one of which was for large truck sleeper bedding, one of which was for seating material, and six of which were for issues related to child restraints systems (CRS). These are:
 - Paccar (57 FR 45868, October 5, 1992)—Noncompliant tape edging surrounding otherwise compliant bedding materials in a large truck sleeper bed was deemed by the Agency to be inconsequential given its low

relative volume to the otherwise complying surrounding material, as well as the fact the tape edging passed bedding industry fire standards. Unlike the Toyota loop fastener material in the subject vehicles, which is not exposed directly to the occupant compartment air space, the tape edging of the sleeper bed was exposed. Nonetheless, the Agency granted the petition on the basis that the noncompliant material was surrounded by compliant material and was of a low relative volume compared to the compliant material.

- Fisher-Price (60 FR 41152, August 11, 1995)—Noncompliant fabric used in CRS shoulder straps was deemed to be inconsequential by the Agency, due to factors which included that the margin of noncompliance was small; the shoulder straps that do not comply are a small part of the CRS itself and a minimal part of the fabric present in a vehicle’s interior; the absence of reports in which the noncompliance exists supported the Agency’s decision that the noncompliance is inconsequential. Toyota stated that the Toyota loop fastener material is also a small part of the vehicle carpet and a minimal part of the materials in the interior of the subject vehicles.
- Century (60 FR 41148, August 11, 1995)—Noncompliant seat covers were determined unlikely to pose a flammability risk when securely sewn to the seat (i.e., the “normal condition”), based on some flammability testing of the material as a composite. Unlike the Toyota loop fastener material in the subject vehicles, which is not exposed directly to the occupant compartment air space in the “normal condition,” the CRS covers were exposed. Similarly, the Toyota subject loop material also passes the FMVSS No. 302 requirements when tested as a “composite.”

The Agency also noted that (as is the case with the subject Toyota loop material) “the absence of fires originating in these child restraints supported the Agency’s decision that the noncompliance does not have a consequential effect on safety.”

- Cosco - (60 FR 41150, August 11, 1995)—Noncompliant fabric used in CRS shoulder straps was deemed to be inconsequential by the Agency due to the similarity to the Fisher-Price request for inconsequentiality and the reasons set out in the notice granting Fisher Price’s appeal (see above). FMVSS No. 302 does not in itself apply to child restraint systems, but paragraph S4 of FMVSS No. 302 is invoked by reference in FMVSS No. 213; therefore, the child restraint petitions are relevant precedents.
- Kolcraft (63 FR 24585, May 4, 1998)—One or more of the fitting, face, or backing materials of CRS seat covers were noncompliant. NHTSA determined the noncompliance to be inconsequential because when tested as a composite (i.e., in the “normal condition”), the covers met FMVSS No. 302 requirements. Similarly, the Toyota subject loop fastener material passes the FMVSS No. 302 requirements when tested as a “composite.”
- Cosco (63 FR 30809, June 5, 1998)—NHTSA found that the noncomplying fiberfill incorporated into a pillow located in a child restraint was inconsequential to safety due to the unlikelihood of exposure to an ignition source for various reasons: that the noncompliant material was encased in materials which complied with FMVSS No. 302, and that the fiberfill was only a limited quantity of noncompliant material used in the CRS. Similarly, the subject Toyota loop fastener material also passes the FMVSS No. 302 requirements when tested as a composite, is unlikely

to be exposed to a direct ignition source, is surrounded by materials which comply with FMVSS No. 302, and is only a limited quantity of noncompliant material in the carpet assembly. The Agency also noted that (as is the case with the subject Toyota loop material) “the absence of fires originating in these child restraints supported the Agency’s decision that the noncompliance does not have a consequential effect on safety.”

- Ford (63 FR 40780, July 30, 1998)—A noncompliant center console armrest “plus pad” was determined by the Agency to be inconsequential to safety in that, because of its location under an exterior cover, it was unlikely to pose a flammability risk due to the unlikelihood of its exposure to an ignition source. The Agency was unaware of any occupant injuries in vehicle post-crash fires that were caused by burning of the console armrests in those vehicles. Toyota argued that Ford undertook “composite” testing like Toyota’s described above to support its petition.
- Graco (77 FR 14055, March 8, 2012)—Certain noncompliant warning labels attached to the outside of detachable accessory pillows were deemed inconsequential by the Agency due to the relatively small size of the label, together with its proximity to other materials on the CRS that were treated with flame retardant materials, rendering the likelihood of ignition of the label extremely low. The subject Toyota loop fastener material is surrounded by compliant materials, is not exposed to the occupant compartment air space, and is a small part of the vehicle carpet assembly and a minimal part of the otherwise compliant materials in the interior of the subject vehicles.
- Toyota (80 FR 4035, January 26, 2015)—Certain noncompliant front and rear seat back and seat cushion seat heaters were determined by the

Agency to be inconsequential to safety in that the seat heaters were unlikely to pose a flammability risk. The Agency was unaware of any occupant injuries regarding these seat heaters in the subject vehicles. The seat heaters would not accommodate a flame rate beyond what is permitted by FMVSS No. 302 when exposed directly to an open flame in the installed condition (as a composite). It was also demonstrated that the seat heater was a very small portion of the overall mass of the seat assembly. According to Toyota, the facts here are similar. The subject loop fastener material is unlikely to be exposed to an ignition source in the installed condition, it does not accommodate a flame beyond what is permitted by FMVSS No. 302 when exposed directly to an open flame in the installed condition (as a composite), the loop material is only a very small portion of the overall mass of the carpet assembly, and there are no known field ignition events.

- Toyota (83 FR 16433, April 16, 2018)—Certain noncompliant needle punch felt material used in the front and rear seat covers and rear center armrest assemblies was determined by the Agency to be inconsequential to safety. The Agency stated that: 1) the needle punch felt material is covered by other materials that do comply with FMVSS No. 302, thus, the needle punch felt material is protected from the occupant compartment where it could directly come into contact with an ignition source such as a match or cigarette; 2) when the needle punch felt material is tested as a composite with the FMVSS No. 302 compliant materials (i.e., seat cover, cover pad, foam pad, seat heater, carpet, and storage bin) that cover the punch felt material, the requirements for burn rate are met accordingly; and 3) the noncompliant material is approximately 0.32 percent of the total

mass of the soft material of the front seat assembly and between 0.48 percent and 0.55 percent (less than 1 percent) of the total mass of the soft material of the rear seat assembly. Therefore, the noncompliant material represents an insignificant quantity of material compared to the total quantity of interior vehicle material. The loop fasteners in the subject vehicles share these same characteristics.

Toyota concluded that the subject noncompliance is inconsequential as it relates to motor vehicle safety and that its petition to be exempted from providing notification of the noncompliance, as required by 49 U.S.C. 30118, and a remedy for the noncompliance, as required by 49 U.S.C. 30120, should be granted.

VI. NHTSA's Analysis:

NHTSA has reviewed Toyota's evaluation that the subject noncompliance is inconsequential to motor vehicle safety. The burden of establishing the inconsequentiality of a failure to comply with a performance requirement in a standard—as opposed to a labeling requirement—is more substantial and difficult to meet. Accordingly, the Agency has not found many such noncompliances inconsequential.¹ Potential performance failures of safety-critical equipment, like seat belts or air bags, are rarely deemed inconsequential.

An important issue to consider in determining inconsequentiality based upon NHTSA's prior decisions on noncompliance issues is the safety risk to individuals who experience the type of event against which the recall would otherwise protect.² NHTSA also does not consider the absence of complaints or injuries to show that the issue is inconsequential to safety. "Most

¹ Cf. *Gen. Motors Corporation; Ruling on Petition for Determination of Inconsequential Noncompliance*, 69 FR 19897, 19899 (Apr. 14, 2004) (citing prior cases where noncompliance was expected to be imperceptible, or nearly so, to vehicle occupants or approaching drivers).

² See *Gen. Motors, LLC; Grant of Petition for Decision of Inconsequential Noncompliance*, 78 FR 35355 (June 12, 2013) (finding noncompliance had no effect on occupant safety because it had no effect on the proper operation of the occupant classification system and the correct deployment of an air bag); *Osram Sylvania Prods. Inc.; Grant of Petition for Decision of Inconsequential Noncompliance*, 78 FR 46000 (July 30, 2013) (finding occupant using noncompliant light source would not be exposed to significantly greater risk than occupant using similar compliant light source).

importantly, the absence of a complaint does not mean there have not been any safety issues, nor does it mean that there will not be safety issues in the future.”³ “[T]he fact that in past reported cases good luck and swift reaction have prevented many serious injuries does not mean that good luck will continue to work.”⁴

NHTSA considered the following factors in evaluating this petition:

First, according to the data provided by Toyota, the noncompliant material has a mass that is insignificant when compared to the overall mass of the carpet assembly. The petitioner stated that the mass of the loop fastener constitutes approximately 0.037 percent or less of the soft material portions of the carpet assembly. However, while Toyota argues that the noncompliant material would not significantly fuel a fire, should it become exposed, the relative measure, i.e., percentage, of a material characteristic, i.e., mass, surface area, thickness, etc. without consideration of other factors, e.g. the surrounding of the noncompliant material with complying materials, does not alone mean such a material would not significantly fuel a fire upon exposure to an ignition source.

Second, the loop fastener material in the subject vehicles is covered by the carpet material which complies with FMVSS No. 302, thus, the loop fastener material is protected from contact with an ignition source originating from the occupant space.

Third, the data submitted by Toyota shows that, when tested as a single unit, the loop fasteners along with the carpet comply with FMVSS No. 302.

Toyota also stated that NHTSA has granted previous petitions whose facts align with those at issue in the instant case. These include a Paccar petition (57 FR 45868, October 5, 1992), a Fischer Price (60 FR 41152, August 11, 1995) petition, a Century petition, (60 FR 41148, August 11, 1995), Kolcraft (63 FR 24585, May 4, 1998), Cosco petition (60 FR 41150,

³ *Morgan 3 Wheeler Limited; Denial of Petition for Decision of Inconsequential Noncompliance*, 81 FR 21663, 21666 (Apr. 12, 2016).

⁴ *United States v. Gen. Motors Corp.*, 565 F.2d 754, 759 (D.C. Cir. 1977) (finding defect poses an unreasonable risk when it “results in hazards as potentially dangerous as sudden engine fire, and where there is no dispute that at least some such hazards, in this case fires, can definitely be expected to occur in the future”).

August 11, 1995) and a Toyota petition (80 FR 4035, January 26, 2015) where the non-compliant material represented a small percentage of the interior fabric. As NHTSA states previously in this section, the relative measure, i.e., percentage, of a material characteristic, i.e., mass, surface area, thickness, etc. without consideration of other factors does not alone mean such a material would not significantly fuel a fire upon exposure to an ignition source. Toyota also offered a past grant where a combination of compliant and non-compliant fabric met FMVSS No. 302 when tested as a single unit. (Kolcraft (63 FR 24585, May 4, 1998)). Finally, Toyota cited several grants where NHTSA determined that noncompliant fabric located where it would not encounter an ignition source was inconsequential to safety. These include two Cosco petitions, (63 FR 30809, (June 5, 1998) and 60 FR 41150 (August 11, 1995), two Toyota petitions (83 FR 16433, (April 16, 2018) and (80 FR 4035, January 26, 2015)) and a Ford petition (63 FR 40780, (July 30, 1998)). As noted above, NHTSA evaluates each petition on its individual facts and does not consider itself to be bound by these earlier grants. Nonetheless, NHTSA has evaluated the subject petition and has made a determination in a similar fashion.

VII. NHTSA's Decision:

NHTSA finds that Toyota has met its burden of persuasion of demonstrating that the noncompliant small loop fasteners sewn into the carpet at issue in this case do not present a risk to safety. The noncompliant fabric present here must be separated from the carpet to be deemed noncompliant as the carpet and loop patch together meet the standard. The loop fasteners also constitute a small percentage of the fabric area and are located where they are not likely to encounter an ignition source. Accordingly, Toyota's petition is hereby granted. Toyota is consequently exempted from the obligation of providing notification of, and a free remedy for, the noncompliance under 49 U.S.C. 30118 and 30120.

NHTSA notes that the statutory provisions (49 U.S.C. 30118(d) and 30120(h)) that permit manufacturers to file petitions for a determination of inconsequentiality allow NHTSA to exempt manufacturers only from the duties found in sections 30118 and 30120, respectively, to

notify owners, purchasers, and dealers of a defect or noncompliance and to remedy the defect or noncompliance. Therefore, this decision only applies to the subject vehicles that Toyota no longer controlled at the time it determined that the noncompliance existed. However, the granting of this petition does not relieve vehicle distributors and dealers of the prohibitions on the sale, offer for sale, or introduction or delivery for introduction into interstate commerce of the noncompliant vehicles under their control after Toyota notified them that the subject noncompliance existed.

(Authority: 49 U.S.C. 30118, 30120: delegations of authority at 49 CFR 1.95 and 501.8)

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